

## Page 1 of 1

All amounts are calculated in domestic currency.

es from 7/12/2017 to 7/12/2017

L/WOs	All Rec. Employees
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Grouped by Vendor ID

[illegible]

METAUX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1L7  
Tel.: 450 641-3330

# Shipping Order

10/07/2017

Order : 126774  
Reference : 36836  
Ship : PICK UP / PICK UP

Customer: 6323336

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

## Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N			
TP12A2	A-2 PLATE TFA 1/2" THICK 2 X 1.25" -0+00 X 13.25" HT, pm76792	50	50	8
SSQT34340654	TUBE SS304 180 GRIT 3/4" X 3/4" X .065" 10 X 20' ***** HT:9G078	200	200	8
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 40 X 3" X 14" HT:248571	11.6	11.6	8
SF1844	304 FLA .125 X 4.000 56 X 65" ***** HT:109760	304.5	304.5	8

SHIP JOURNEY COLLECT  
J-P

SPN-7-12

Shipping :  
Package No :  
Merchandise Received:

Ref. :

METAUX SOLUTIONS INC  
2625 BOUL JACQUES CARTIER EST  
LONGUEUIL, QUEBEC  
J4N 1L7  
Tel.: 450 641-3330

Customer: 6323336

Shipping Order 10/07/2017

Order : 126774  
Reference : 36836  
Ship : PICK UP / PICK UP

DART AEROSPACE LTD  
1270, ABERDEEN STREET  
HAWKESBURY, ONTARIO  
K6A 1K7

Ship To

Same

Tel.: 1 613 632-3336

Item No.	Description	Qty	Qty. Delivered	B/O Qty
TP12A2	***** FACTURER E-MAIL ***** SUPER IMPORTANT SUR LE PACKING SLIP INSCRIRE LES HEAT N A-2 PLATE TFA 1/2" THICK 2 X 1.25" -0+00 X 133.25" HT; pm76792	50	50	8
SSQT34340654	TUBE SS304 180 GRIT 3/4" X 3/4" X .065" 10 X 20' ***** HT;9G078	200	200	8
MP124130N	4130 NORM PLATE .500 THICK AMS 6345 40 X 3" X 14" HT;248571	11.6	11.6	8
SF1844	304 FLA .125 X 4.000 56 X 65" ***** HT;109760	304.5	304.5	8

SHIP JOURNEY COLLECT  
J-P



Shipping :  
Package No :  
Merchandise Received :  
Ref. :

# NUCOR STEEL

4537 S. NUCOR ROAD; CRAWFORDSVILLE, IN 47933

## REPORT OF TESTS

ATIN:	DATE: 1/20/15
FAX:	
SOLD TO:	CUSTOMER ORDER # 081414MC
SIZE: 0.500" by 36" steel sheet	PRODUCT: HRPO light oil FINE GRAIN AIRCRAFT QUALITY 4130 AMS 6345 Rev C ASTM-A 506 ASTM-A-635 AMS 2301 Rev J [successor to MIL-S-18729 COND N.] NORMALIZED OR OTHERWISE HEAT TREATED

### AMS 6345

COIL #	HEAT #	YIELD	TENSILE	ELONG
1961550	248571-06	81.5 ksi	115 ksi	20%

TEST	RESULT	
*Average austenite grain size	#8	Pass
Decarburization (P/F)		Pass
*Bend Test (P/F)		Pass
*Response to Heat Treatment (P/F)	45 HRC	Pass
*AMS 2301 Quality Freq/Sev (P/F)	0/0	Pass

\*These tests performed by outside lab, ISO 17025 certified.

mk 12/10/18

HEAT #	C	Mn	P	S	Al	Si	N	Cr	Ni	Cu	Mo
248571	0.287	0.55	0.006	0.000	0.028	0.208	0.007	0.860	0.017	0.043	0.165

WE HEREBY CERTIFY THE ABOVE  
IS CORRECT AS CONTAINED IN  
THE RECORDS OF THE CORPORATION.

Melted and Manufactured in the USA

QF-0200, 10/17/05

  
Cold Mill Metallurgist

# Kingmaker Steel Co., Inc.

## Stainless Steel Tube and Pipe

133 Belmont Drive, Somerset, NJ 08873-1203

Tel.: (732) 302-1800, Fax: (732) 302-1822

000429

Date: 6/8/2017

Invoice No: KM2017/1360

Purchase P008047

Order No:

Sold To:

### Material Certification

ISO 9001:2015

ISO 14001:2004

EN 10204/3.1B

Ship To:

Stainless Steel T.I.G. Welded Tubing.

Country of Melt: Taiwan, Country of Origin: Taiwan.

Item	Description	Heat No.	Finish	Specification	Grade
1:	2" X 3" REC X 0.180"W X 20'	TBG070758	MF	ASTM A554-16	MT-304
2:	1-1/2" OD X 0.120"W X 20'	5A581	180G	ASTM A554-16	MT-304
3:	2" SQ X 0.180"W X 20'	5B076	180G	ASTM A554-16	MT-304
4:	3/4" SQ X 0.062"W X 20'	9G078	180G	ASTM A554-16	MT-304
5:	2" SQ X 0.180"W X 20'	5E259	MF	ASTM A554-16	MT-304

DAS  
9  
9-89

### CHEMICAL PROPERTIES

	C	Si	Mn	P	S	Cr	Ni	Mo	N	Cu
1:	.038	.440	1.08	.034	.001	18.09	8.03			
2:	.018	.270	1.31	.031	.006	18.13	8.01			
3:	.024	.290	1.44	.031	.007	18.23	8.05			
4:	.025	.650	1.57	.031	.001	18.40	8.00			
5:	.024	.410	1.36	.029	.001	18.20	8.01			

### MECHANICAL PROPERTIES

	Tensile (N/mm2)	Yield (N/mm2)	Elong. (%)	Hardness (HRB)	Flattening	Hydrostatic	Eddy Current
1:	666.00	306.00	54.00	88.00			
2:	648.00	302.00	51.00	86.00			
3:	619.00	271.00	53.00	85.00			
4:	677.00	279.00	53.00	85.00			
5:	640.00	289.00	55.00	87.00			

WE HEREBY CERTIFY THAT TO THE BEST OF OUR KNOWLEDGE, THE MATERIAL LISTED ABOVE HAS BEEN MANUFACTURED IN ACCORDANCE WITH AND MEET THE ABOVE APPLICABLE SPECIFICATIONS AND GRADES, AND ALSO THAT THE MATERIAL WAS PRODUCED IN A MERCURY FREE ENVIRONMENT. THE CHEMICAL COMPOSITIONS OF THE MATERIAL ARE IN ACCORDANCE WITH ASTM A240.

Page: 1/1


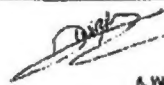
Carrie Wang

Authorized Signature

6/8/2017

Date

<b>operam</b> Correspondence address: Operam Group Swinnenwijerweg 5, Poort Gent 7523 3600 Gent, Belgium Tel. +32 (0)9 30 21 11		<b>MILL CERTIFICATE DS EN 10204/3.1</b> <b>CERTIFICAT DE RECEPTION NF EN 10204/3.1</b> <b>ABNAHMEPRÜFZEUGNIS DIN EN 10204/3.1</b>		N-Nr-N 16K0023863-01 V01																																																																									
Certified acc. PED 97/23/EC Annex I § 4.3 by Certification Body 0036 of TÜV SÜD Industrie Service GmbH with cert No. 142007/MUC. Renounced of counter signature agreed by TÜV SÜD (9/3/2007). Approved acc. AD 2000-Merkblatt W/OTRD 100 by TÜV SÜD Industrie Service GmbH. Confirmation letter from TÜV SÜD Industrie Service GmbH of 07/05/2010 about the uniformity of coils acc. AD 2000 W2 § 4.1.1		Tech. Req: AD 2000 W2 - AD 2000 W10 - EN 13445-2																																																																											
Manufacturer's works order number N° de la commande usine production Werksauftragsnummer <b>86318219/01-20699/578/01</b>		Surveyor's mark Cachet de l'expert Stempel des <b>GNKI</b> Werkstatthauptbedienenden		Purchaser's order number N° de commande client Kundenbestellnummer <b>604009544</b>																																																																									
Product - Produit - Erzeugnis <b>COIL, HOT ROLLED, ANNEALED AND PICKLED, UNTRIMMED</b> <b>COIL, LAMINE A CHAUD, RECUIT+DECAP, BORDS NON REFINÉS</b> <b>COIL, WARMGEWALZT, BEGLÜHT UND GEBEIZT, UNBESALUMT</b>		Customer article number Numéro client Artikelnummer des Kunden <b>ART018197</b>																																																																											
Steel designation Désignation de l'acier Stahlbezeichnung <b>EN 10028-3-2009 1.4307 / 1.4301</b> <b>EN 10028-3-2014 1.4307 / 1.4301</b> <b>ASTM A 240-2015 TYPE 304L / 304</b> <b>ASME SA 240-2015 TYPE 304L / 304</b> <b>EN 15908-4-2009 1.4307 / 1.4301</b>		Finish Présentation Aufzeichnung <b>ID</b> <b>ID</b> <b>NO 1</b> <b>NO 1</b> <b>ID</b>		Steelmaking process Mode d'élaboration de l'acier - Stahlherstellungsverfahren Proc. process: Electric arc furnace - VOD/AOD - Continuous casting Proc. fabric: Four à arc - VOD/AOD - Coulée continue Fortigungsablauf: Elektro-Ofen - VOD/AOD - Stranggussanlage Any supplementary requirements Prescriptions supplémentaires - Zusätzliche Anforderungen																																																																									
NACE MR 0175 / ISO 15156-3 - NACE MR 0103 / ASTM A486 / A480M - ASME SA 486 / SA 480M // DIMENSION AND SHAPE TOLERANCES ACC. TO EN ISO 9444-3 // FREE OF RADIOACTIVE CONTAMINATION // CORROSION TEST: ASTM A262-B-0K		Product delivery condition Etat de livraison du produit - Lieferzustand Solution treated Hypertempe: <b>1050 °C</b> Locustage (gegl.) / abgedrückt:		Forced air-water/air forced-water Châuffage Luft-Wasser																																																																									
Identification of the product Identification du produit - Identifizierung des Erzeugnisses <b>MELTND IN BELGIUM, MADE IN BELGIUM</b>		Dimensions Dimensions - Abmessungen Thickness Epaisseur - Stärke <b>3.17 mm</b>		Number of pieces Nb de pièces - Stückzahl <b>1</b>																																																																									
Coil n. N° Bobine - Band Nr. <b>61154425</b>		Heat n. N° Coulée - Schmelz Nr. <b>109760</b>		Net weight Poids net - netto Gewicht <b>19020 KG</b>																																																																									
<b>CHEMICAL ANALYSIS - ANALYSE CHIMIQUE - CHEMISCHE ZUSAMMENSETZUNG</b>																																																																													
<table border="1"> <thead> <tr> <th></th> <th>C</th> <th>Si</th> <th>Mn</th> <th>Ni</th> <th>Cr</th> <th>Mo</th> <th>Ti</th> <th>N</th> <th>S</th> <th>P</th> <th>Co</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Required - Exigé - Minimal</td> <td>0.03H</td> <td>0.75</td> <td>2.00</td> <td>8.00</td> <td>17.50</td> <td></td> <td></td> <td>0.100</td> <td>0.015</td> <td>0.045</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Actual Analysis</td> <td>0.027</td> <td>0.37</td> <td>1.44</td> <td>8.00</td> <td>18.07</td> <td></td> <td></td> <td>0.074</td> <td>0.005</td> <td>0.031</td> <td>0.200</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Analysis Schmelze</td> <td>C71</td> <td>C72</td> <td>C73</td> <td>C74</td> <td>C75</td> <td>C76</td> <td>C77</td> <td>C78</td> <td>C79</td> <td>C80</td> <td>C81</td> <td>C82</td> <td>C83</td> <td>C84</td> <td>C85</td> <td>C86</td> <td>C87</td> </tr> </tbody> </table>							C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	Co							Required - Exigé - Minimal	0.03H	0.75	2.00	8.00	17.50			0.100	0.015	0.045								Actual Analysis	0.027	0.37	1.44	8.00	18.07			0.074	0.005	0.031	0.200							Analysis Schmelze	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87
	C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	Co																																																																		
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Analysis Schmelze	C71	C72	C73	C74	C75	C76	C77	C78	C79	C80	C81	C82	C83	C84	C85	C86	C87																																																												
Positive material identification carried out: OK Tests de vérification de la conformité de la nuance fournie: OK Verifizierungsprüfung wurde durchgeführt: OK																																																																													
<b>MECHANICAL PROPERTIES - PROPRIÉTÉS MÉCANIQUES - MECHANISCHE WERTE</b> EN ISO 6593-1 B / A-SA 370																																																																													
Room temperature - Température ambiante - Raumtemperatur																																																																													
Yield or proof strength Limite d'élasticité Dehnengrenze <b>MPa</b>																																																																													
Tensile strength Résistance à la traction Zugfestigkeit <b>MPa</b>																																																																													
Elongation after fracture Allongement après rupt. Bruchdehnung <b>%</b>																																																																													
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Impact strength test Essai de résilience Kerbschlagzähigkeitstest																																																																													
Corrosion test Test de corrosion Korrosionstest																																																																													
EN ISO 3451/2 - A10K																																																																													
Location of the sample (1) Emplacement de l'échantillon Lage des Probenstückchens 1. Front - Début - Anfang 2. Back - Fin - Ende 3. Middle - Milieu - Mitte																																																																													
The delivery is in accordance with the order La fourniture est conforme aux exigences de la commande Die Lieferung entspricht den Bestellbedingungen																																																																													
Packing list Avis d'expédition Lieferscheinnummer <b>2016037052-20699</b>																																																																													
Organization inspection Organisation et/ou service contrôle Überwachungsabteilung <b>Quality Department</b> <b>3/5/2016</b> The Inspector Le responsable: <b>D. Raemackers</b>																																																																													
Direction of the test pieces (2) Orientation des éprouvettes Probierorientierung T. Transverse - Travers - Quer L. Longitudinal - Long - Längs																																																																													

 Aperam Stainless Services & Solutions Luxembourg S.A. Avenue de l'Europe Site du PED - BP 55 L-4801 RODANGE Tel: +352 60 64 81 1 Fax: +352 60 64 81 84		<b>TEST REPORT</b> <b>RELEVÉ DE CONTRÔLE</b> <b>WERKSZEUGNIS</b> According to / Selon / Nachdem EN 10204		BL: 0060196 - 2 Date: 22/11/2018												
Manufact / Product / Herstell APERAM STAINLESS EUROPE			Item / Article / Produkt (EN 10088) F801844G													
Supplier Lot / Lot Fourn. / Band Nr 61154425			FLAT BAR 4307 1D 3.170 X 101,60 X 3657,80													
Heat N° / N° de coulée / Schmelz Nr 109760			Customer / Client / Kunde													
Steel Designation / Désignation Acier / Stahlbezeichnung EN 10028-7 WNR 1.4307/1.4301 EN 10088-2 WNR 1.4307/1.4301 ASTM A 240(M) TYPE 304L/304 ASME SA 240 TYPE 304L/304			Order / Commande / Order 609037632 - 03													
			Reference / Référence / Referenz MPQ18-61 (C106958)													
AD 2000 W2 - AD 2000 W10 - PED 2014/68/EU																
Mill Certificate / N° de Certificate / Prüfzeugnis Nr 16K0023863																
Chemical Analysis / Analyse Chimique / Chemische Zusammensetzung																
	C	Si	Mn	Ni	Cr	Mo	Ti	N	S	P	Cu	Al				
Cert Analysis Analyse Analyse	0,027	0,375	1,447	8,001	18,073			0,074	0,005	0,031						
Mechanical Properties / Propriétés Mécaniques / Mechanische Werte EN 10002-1																
Yield strength Limite d'élasticité Dehnungsfluss		Tensile strength Résistance à la traction Zugfestigkeit		Elongation after fracture (A) Allongement après rupture Bruchdehnung		Hardness Dureté Härte										
Rp 0.2 %		Rp 1%		Rm		A5		B10mm		HRS		DDG				
272		322		635				55		82,9		42				
Material Identification / Identification Matière / Identifizierung Sachgebiet																
Lot No N° Lot Los Nr	Weight Poids Gewicht		Lot No N° Lot Los Nr	Weight Poids Gewicht		Lot No N° Lot Los Nr	Weight Poids Gewicht		Lot No N° Lot Los Nr	Weight Poids Gewicht		Lot No N° Lot Los Nr	Weight Poids Gewicht		Lot No N° Lot Los Nr	Weight Poids Gewicht
	Kg			Kg			Kg			Kg			Kg			Kg
0908194	731															
0909208	768															
Number of lots / Nombre de lots / Bunde Anzahl : 2 Total weight / Poids Total / Gesamt Gewicht [Kg] : 1489						The Inspector Le Responsable Der Werksachverständige  A. Viallet										

196662

CERTIFICAT D'ANALYSE

DART AEROSPACE LTD  
 1270, ABERDEEN STREET  
 HAWKESBURY, ONTARIO  
 K6A 1K7

12 juillet 17

Product Description	Shipped Pcs	Back Ordred	PO LINE
A2-05000	1.00	0.00	
1/2 X 32 5/16" X 139 7/8" A2 PLATE			
ASTM A-681-08			
DFARS Compliant			
PLATE#: 417146A	PM HEAT#: 76792	DAS 5 Q-89	BHN 226.00
Country of Origin USA			
C - 1.0000 Mn - 0.6900 P - 0.0220 S - 0.0010 Si - 0.3400 Ni - 0.1800			
Cr - 5.0800 Mo - 1.0200 Cu - 0.0800 V - 0.3200 W - 0.0500			

ITEM 1: 2 X 1.25" X 133.25"

COMMANDE : 126774

REF : 36836

Métaux Solutions inc. certifie que les analyses sur ce document sont exactes et que le matériel rencontre les spécifications énumérées.

Préparer par 



# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 4Steel-42-BG.500x1.250  
 DATE: JUL 18 2017

PO / BATCH NO.: PO36836/M138008

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 22'  
 QUANTITY INSPECTED: 22'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.500x1.250  
 THICKNESS RECEIVED: 0.533x1.188-1.355  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>ASTM A681</u>
CORRECT THICKNESS	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	<u>HT #76792</u>
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

<b>QC 18 INSPECTION</b>	<b>ENGINEERING SIGNOFF (if required)</b>
INSPECTED BY: <u>5</u> <u>9-89</u> DATE: <u>JUL 18 2017</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI A2 TOOL STEEL, ANNEALED CONDITION

SPECIFICATION: ASTM A681

PART NUMBER: MSTEE-A2-BT.TTT X W.WWW

WHERE "T.TTT" = THICKNESS IN INCHES  
"W.WWW" = WIDTH IN INCHES

EG. 0.500" X 1.250" BAR = MSTEE-A2-B0.500X1.250

TOLERANCES: PER ASTM A681 AS FOLLOWING

TABLE 14 Hot-Rolled Flat Bars  
(Width and Thickness Tolerances Width Tolerances)<sup>a</sup>

Specified Widths, in. (mm)	Specified Widths, in. (mm)		Width Tolerances, in. (mm)	
	Under	Over	Under	Over
To 1 (25.4), incl			0.016 (0.41)	0.031 (0.79)
Over 1 to 3 (25.4 to 76), incl			0.031 (0.79)	0.047 (1.19)
Over 3 to 5 (76 to 127), incl			0.047 (1.19)	0.063 (1.60)
Over 5 to 7 (127 to 178), incl			0.063 (1.60)	0.094 (2.38)
Over 7 to 10 (178 to 254), incl			0.078 (1.98)	0.125 (3.18)
Over 10 to 12 (254 to 305), incl			0.094 (2.38)	0.156 (3.96)

Specified Widths, in. (mm)	Specified Widths, in. (mm)		Thickness Tolerances, in. (mm)	
	Under	Over	Under	Over
To 1 (25.4), incl			Over 1/2 to 1 (12.7 to 25.4), incl	Over 1 to 2 (25.4 to 50.8), incl
Over 1 to 2 (25.4 to 50.8), incl	0.006 (0.15)	0.010 (0.25)	0.010 (0.25)	0.020 (0.51)
Over 2 to 3 (50.8 to 76), incl	0.006 (0.15)	0.010 (0.25)	0.010 (0.25)	0.020 (0.51)
Over 3 to 4 (76 to 102), incl	0.006 (0.15)	0.010 (0.25)	0.010 (0.25)	0.020 (0.51)
Over 4 to 5 (102 to 127), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 5 to 6 (127 to 152), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 6 to 7 (152 to 178), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 7 to 8 (178 to 203), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 8 to 9 (203 to 229), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 9 to 10 (229 to 254), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)
Over 10 to 12 (254 to 305), incl	0.010 (0.25)	0.015 (0.38)	0.010 (0.25)	0.020 (0.51)

<sup>a</sup> Out of square tolerance to be 1/4 of total width tolerance max.

RELEASED  
R 2012-09-12

REV.	NEW ISSUE	DESCRIPTION		AP	BY	DATE
		DESIGN	DRAWN			
		CHECKED	AP			
		MFG. APPR.	N/A			
		APPROVED	AP			
		DE APPR.	AP			
		DART AEROSPACE LTD				
		HAWKESBURY, ONTARIO, CANADA				
		DRAWING NO.				
		MSTEEL-A2				
		TITLE				
		AISI A2 TOOL STEEL				
		SHEET 1 OF 1				
		SCALE				
		NTS				
		DATE 12.09.06				

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PURCHASE MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBING

FINISH:

ASTM A554 MILL FINISH  
OR  
ASTM A289 MILL FINISH

DAS 9  
9-89

3/4" X .065"

WHERE:

A.AAA = WIDTH IN INCHES  
.TTT = WALL THICKNESS IN INCHES

PART NUMBER:

M304TS | A.AAA | W | .TTT  
| WIDTH | WALL |

PART NUMBER:

EG. 0.75" X 0.75" X 0.049 WALL = M304TS0.750W.049

RELEASED  
R 2014-05-26

D	"SEAMLESS" REMOVED FROM PURCHASE MATERIAL SPECIFICATION (SEE NCR14-3818)			DB	14.05.20
C	"SEAMLESS" ADDED TO PURCHASE MATERIAL. ASTM A289 ADDED TO FINISH. REASON: SPEC ADDED FOR 1/2" TUBING			AJS	09.10.16
B	DRAWING MOVED TO "B" SIZE BORDER. FINISH ADDED (SEE NCR 08-045 FOR DETAILS)			AJS	09.08.28
A	NEW ISSUE			DS	01.06.08
REV.	DESCRIPTION			BY	DATE
DESIGN	DS	DART AEROSPACE LTD			
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA			
CHECKED	DB	DRAWING NO.			
MFG. APPR.	DB	M304TS			
APPROVED	DB	TITLE			
DE APPR.	DB	304/316 SQUARE TUBING			
DATE	14.05.20	SCALE			
					NONE
SHEET 1 OF 1					
REV. D					
DART AEROSPACE LTD					
HAWKESBURY, ONTARIO, CANADA					
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# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304T50.750w.065  
 DATE: 11-07-17

PO / BATCH NO.: P036836/M138008

MATERIAL CERT REC'D: yes  
 QUANTITY RECEIVED: 200'  
 QUANTITY INSPECTED: 200'  
 QUANTITY REJECTED: 0

THICKNESS ORDERED: .065  
 THICKNESS RECEIVED: .060  
 SHEET SIZE ORDERED: N/A  
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/>	N	
CORROSION	Y	<input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/>	N	ASTM A534-16
CORRECT THICKNESS	<input checked="" type="radio"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/>	N	HT# 96073
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
TYPE OF MATERIAL SIZE OF TEST SAMPLE HARDNESS / DUROMETER READING	HRC	HRB	DUR A	DUR D	

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>9</u> DATE: <u>11-07-17</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

# MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M4131NB.500X3.00

PO / BATCH NO.: 36836/138658

DATE: 17/07/18

MATERIAL CERT REC'D: yes

QUANTITY RECEIVED: 46.6

QUANTITY INSPECTED: 46.6

QUANTITY REJECTED: \_\_\_\_\_

THICKNESS ORDERED: .500

THICKNESS RECEIVED: .506

SHEET SIZE ORDERED: \_\_\_\_\_

SHEET SIZE RECEIVED: \_\_\_\_\_

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	AMS 12345
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	HEAT# 248571
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	M4131NB.500X3.00
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	M138658
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW				
TYPE OF MATERIAL	HRC	HRB	DUR A	DUR D
SIZE OF TEST SAMPLE				
HARDNESS / DUROMETER READING				

testers located in the Quality Office

QC 18 INSPECTION ENGINEERING SIGNOFF (if required)

INSPECTED BY: [Signature]

SIGNED OFF BY: \_\_\_\_\_

DATE: 17/07/18

DATE: \_\_\_\_\_

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



PURCHASE MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528

PART NUMBER:

M4130N-B | T.TTT | X | WW.WWW |  
THICK | WIDTH |

WHERE T.TTT = THICKNESS (IN INCHES)  
WW.WWW = WIDTH (IN INCHES)

EG. 0.5" X 3.0" BAR = M4130N-B0.500X03.000

RELEASE  
08-07-09

B	ADD AMS 6345	PH	08.05.05
A	NEW ISSUE	DS	01.06.08
REV.	DESCRIPTION	BY	DATE
DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN			
CHECKED		DRAWING NO.	REV. B
MFG. APPR.		M4130N-B	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		4130 BAR	NTS
DATE	08.05.05	COPYRIGHT © 2001 BY DART AEROSPACE LTD	
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Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO36836

Purchase Order Date 6/27/2017

PO Print Date 6/27/2017

Page Number 1 of 4

**Order From :**

VC-MET002

METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

**Ship To :** DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

E-MAIL  
JUN 27 2017

**Contact Name**

**Vendor Phone**

800 558 8858

**Ship To Contact**

**Ship To Phone**

**Ship Via:**

Journey Freight collect

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	MI174PH-H900R0.750	17-4 SS H900 ROUND BAR 0.750"	7/13/2017 No 7/13/2017		12.00 f	\$68.90	\$826.80

MATERIAL: 17-4 PH COND. H900

AS PER AMS 5643

NOTE: METAUX SOLUTION WILL SEND MATERIAL TO METCOR TO HEAT TREAT H900

FINISH:

HEAT TREAT TO COND H900

FTY IN EXCESS OF 170KSI

FTU IN EXCESS OF 190KSI

PER AMS2759/3

DETAIL C OF C REQUIRED

SP 17-7-12.

Line Total:

\$826.80

Note:

6/27/2017



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO36836

Purchase Order Date 6/27/2017

PO Print Date 6/27/2017

Page Number 2 of 4

Order From :  
METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

VC-MET002

Ship To : DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Contact Name

Vendor Phone 800 558 8858

Ship To Contact

Ship To Phone

Ship Via: Journey Freight collect

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB Destination-Collect

Chantal Lavoie

2	MSTEEL-A2-B0.500X1.250	AISI A2 TOOL STEEL BAR, 0.500 X 1.250	7/4/2017	24.00	\$12.38	\$297.00
			Yes	f		
			7/4/2017			

MATERIAL: AISI A2 TOOL STEEL, ANNELED CONDITION  
AS PER A681

TOLERANCE -0+0" AS PER QUOTATION #16619  
CUT AT 1.25"

Line Total: \$297.00

3	M304TS0.750W.065	304 SQ Tube .75x.75x.065W	7/4/2017	200.00	\$2.75	\$550.00
			Yes	f		
			7/4/2017			

MATERIAL: AISI 304/316 STAINLESS STEEL SQUARE TUBING  
AS PER ASTM A554 MILL FINISH  
OR  
AS PER ASTM A269 MILL FINISH

DAS  
9  
9-89

SP 17-712

Line Total: \$550.00

Note:

6/27/2017





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO36836

Purchase Order Date 6/27/2017

PO Print Date 6/27/2017

Page Number 3 of 4

Order From :  
METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

VC-MET002

Ship To : DART AEROSPACE LTD  
1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Contact Name

Vendor Phone 800 558 8858

Ship To Contact

Ship To Phone

Ship Via: Journey Freight collect

Ship Acct:

Buyer

Customer POID

Customer Tax # 10127-2607

Terms Net 30

Currency CAD

FOB Destination-Collect

Chantal Lavoie

4	M4130NB0.500X03.000	4130 Bar 0.500 x 3.00	7/4/2017	46.67	\$29.95	\$1,397.66
			Yes	f		
			7/4/2017			

MATERIAL: AISI 4130N STEEL BAR PER MIL-S-6758 OR AMS 6345/6348/6370/6528

40 PCS CUT TO SIZE 14"

Line Total: \$1,397.66

5	71500-20	304 SLAT 0.125" X 4" X 65" LONG	7/4/2017	56.00	\$31.30	\$1,752.80
			Yes	Each		
			7/4/2017			

Line Total: \$1,752.80

Deliver To: WATER JET

SP 177-12.

Note:

6/27/2017



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID PO36836

Purchase Order Date 6/27/2017

PO Print Date 6/27/2017

Page Number 4 of 4

**Order From :**

VC-MET002

METAUX SOLUTIONS  
2625 BOUL JACQUES-CARTIER EST  
LONGUEUIL, QC J4N 1L7  
CA

**Ship To :** DART AEROSPACE LTD

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

**Contact Name**

**Vendor Phone** 800 558 8858

**Ship To Contact**

**Ship To Phone**

**Ship Via:** Journey Freight collect

**Ship Acct:**

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Terms**

Net 30

**Currency**

CAD

**FOB**

Destination-Collect

6 71401-45 PROCUREMENT 7/4/2017 1.00 \$0.00 \$0.00  
QUALITY CLAUSES

No

7/4/2017

**Procurement Quality Clauses**

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification (as applicable)

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

8017-7-12

**Line Total:** \$0.00

**PO Total:** \$4,824.26

**Note:** Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit [www.dartaerospace.com](http://www.dartaerospace.com) for further explanation.

Change Nbr: 1

Change Date: 6/27/2017